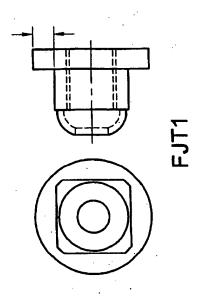
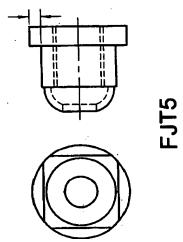


Figure 1





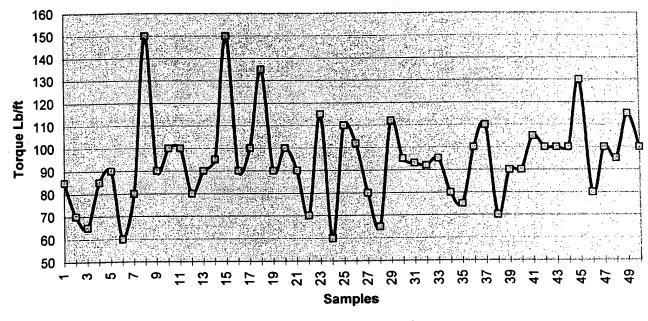


# **TORQUE STUDY "FJT-1"**

	,								
1.	85	11.	100	21.	90	31.	93	41.	105
2.	70	12.	80	22.	70	32.	92	42.	100
3.	65	13.	90	23.	115	33.	95	43.	100
4.	85	14.	95	24.	60	34.	80	44.	100
<b>5</b> .	90	15.	150	<b>25</b> .	110	35.	75	45.	130
6.	60	16.	90	26.	102	36.	100	46.	80
7.	80	17.	100	27.	80	37.	110	47.	100
8.	150	18.	135	28.	65	38.	70	48.	95
9.	90	19.	90	29.	112	39.	90	49.	100
10.	100	20.	100	30.	95	40.	90	50.	115
10.	100	20.	100	30.	95	40.	90	50.	115

Average:	94,5
Std Deviation:	19,6
Average Range:	14,1

Torque FJT-1



──Torque FJT-1

FIGURE 3

# **TORQUE STUDY "FJT-5"**

1.	125	11.	90	21.	95	31.	95	41.	85
2.	115	12.	95	22.	60	32.	85	42.	90
3.	85	13.	100	23.	110	33.	90	43.	100
4.	85	14.	85	24.	90	34.	90	44.	70
5.	95	15.	90	25.	95	35.	95	45.	100
6.	100	16.	96	26.	100	36.	90	46.	85
7.	108	17.	90	27.	100	37.	90	47.	80
8.	70	18.	105	28.	130	38.	90	48.	80
9.	95	19.	80	29.	90	39.	105	49.	100
10.	115	20.	95	30.	100	40.	110	50.	80

Average:	94,0
Std Deviation:	12,9
Average Range:	9,4

**Torque FJT-5** 

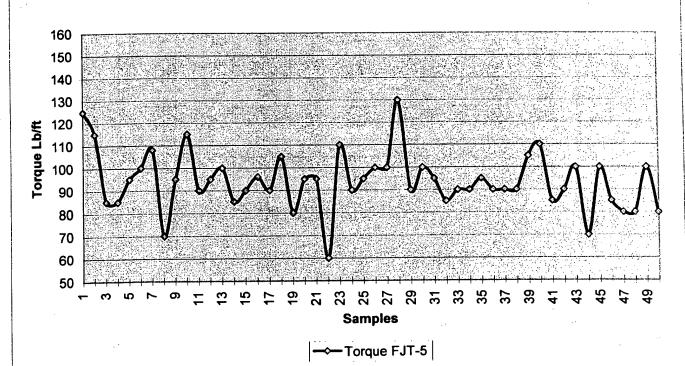
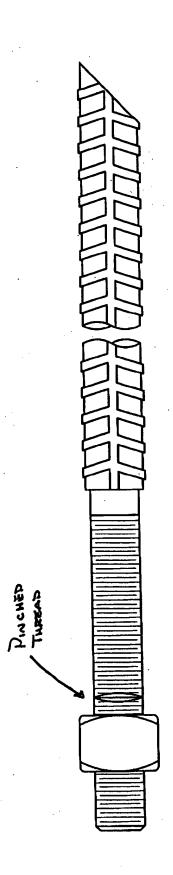


FIGURE 4



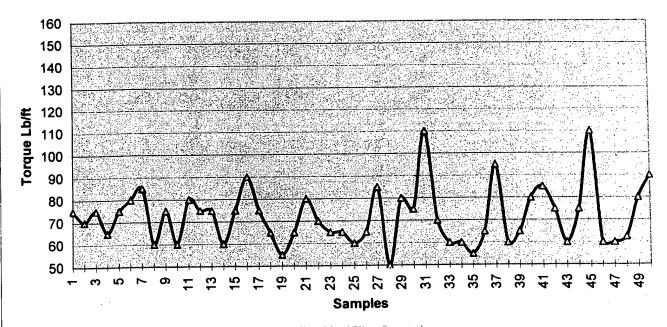


### **TORQUE STUDY "PINCH"**

1.	75	11.	80	21.	80	31.	110	41.	85
2.	70	12.	75	22.	70	32.	70	42.	75
3.	75	13.	75	23.	65	33.	60	43.	60
4.	65	14.	60	24.	65	34.	60	44.	75
5.	75	15.	75	25.	60	35.	55	45.	110
6.	80	16.	90	26.	65	36.	65	46.	60
7.	85	17.	75	27.	85	37.	95	47.	60
8.	60	18.	65	28.	50	38.	60	48.	65
9.	75	19.	55	29.	80	39.	65	49.	90
10.	60	20.	65	30.	75	40.	80	50.	80
		,	<u> </u>	•		•		<b>-</b>	

Average:	72,2
Std Deviation:	12,8
Average Range:	10,1

# **Torque Pinch**



Torque pinch

# TORQUE STUDY "TORQBOLT"

						:			
1.	90	11.	90	21.	90	31.	90	41.	95
2.	90	12.	100	22.	90	32.	100	42.	95
3.	90	13.	95	23.	95	33.	90	43.	95
4.	90	14.	95	24.	90	34.	90	44	90
5.	95	15.	90	25.	95	35.	90	45.	95
6.	95	16.	95	26.	95	36.	95 `	46.	100
7.	90	17.	95	27.	100	37.	100	47.	95
8.	95	18.	95	28.	100 🛴	38.	100	48.	95
9.	100	19.	100	29.	95	39.	90	49.	95
10.	90	20.	100	30.	95	40.	90	50.	90
		•		•		_			

Average:	94,1
Std Deviation:	3,7
Average Range:	3,1

# **Torqbolt**

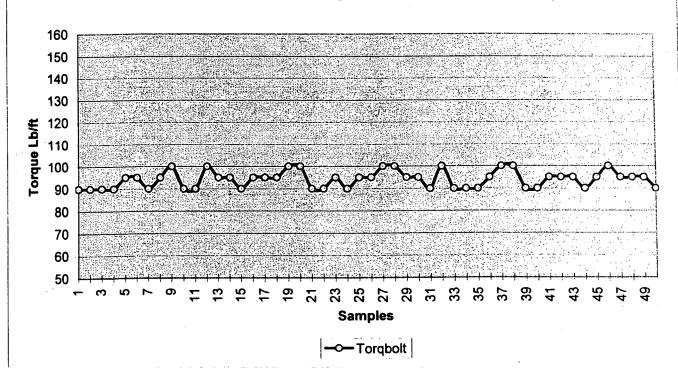
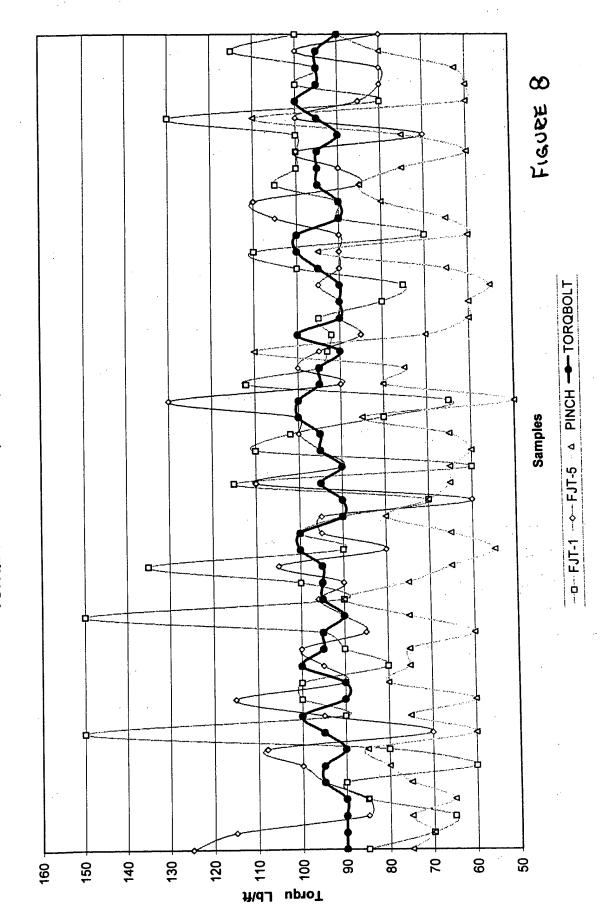
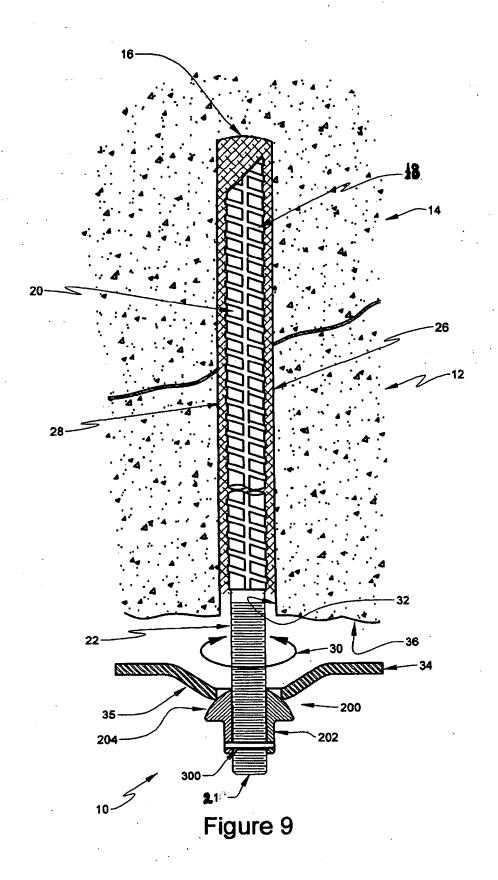


FIGURE 7

TORQBOLT VS FJT-1, FJT-5, PINCH



test-torqbolt-pinch-fjt1-fjt5



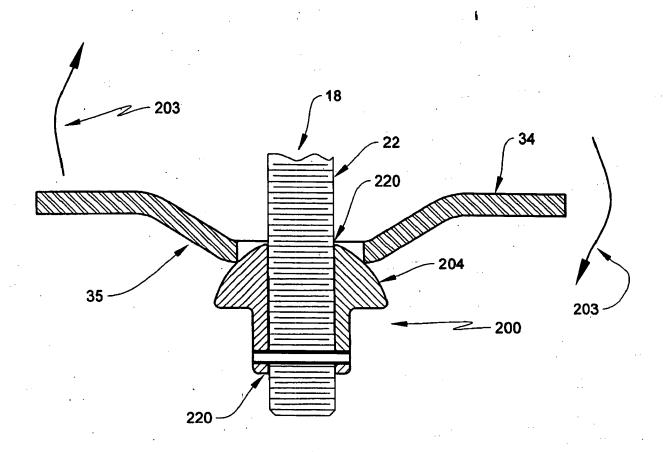


Figure 10

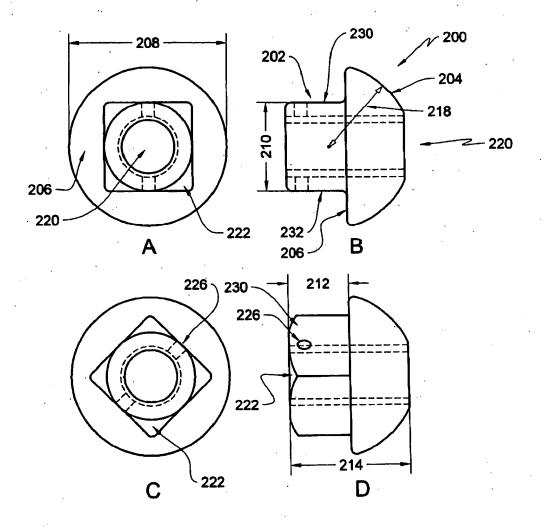


Figure 11

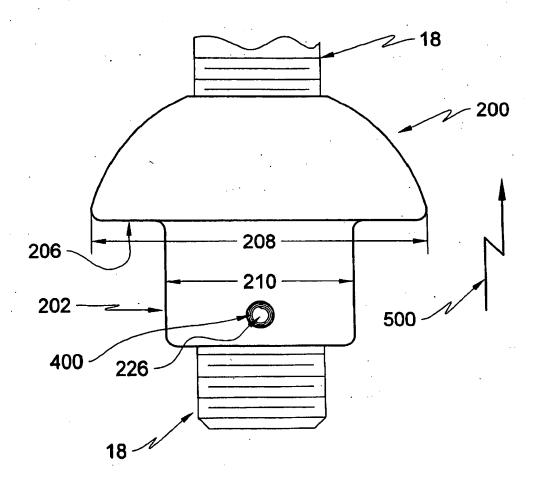


Figure 12

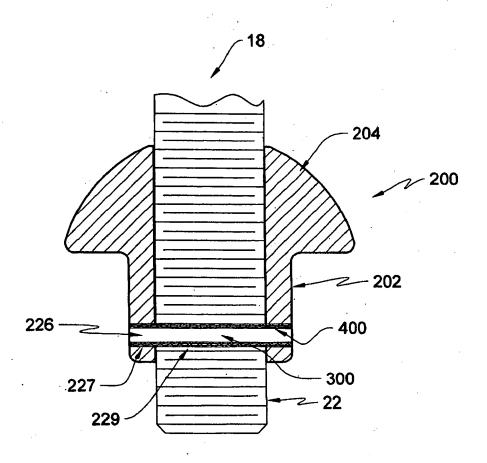
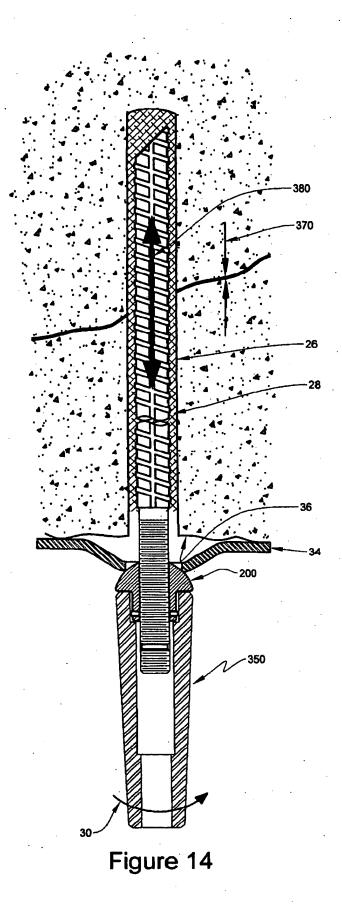


Figure 13



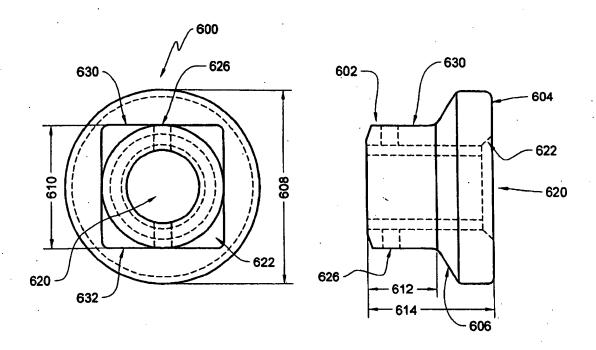


Figure 15

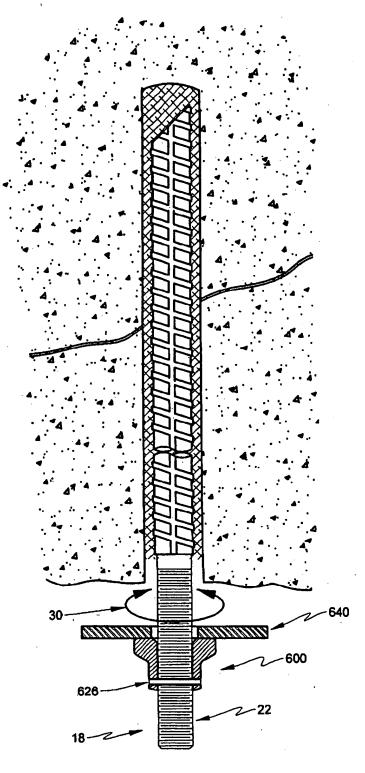


Figure 16

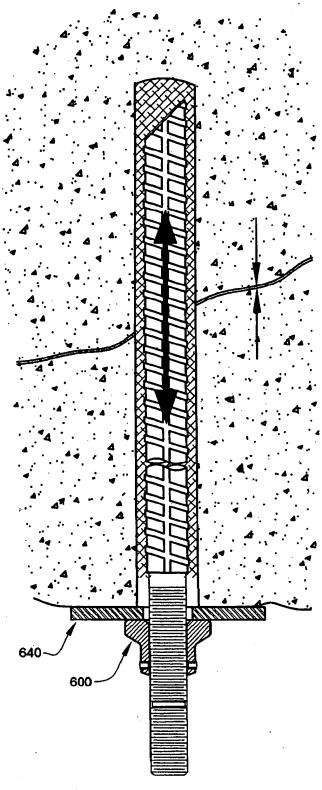


Figure 17

Figure 18

JAN 2003	FEB 2003		APR 2003	MAY 2003	1	JUL		SEP	OCT	Total
						2003		2003	2003	
16000	6000	10000	10500	12000	12000	10375	9125	13600	17300	92,000
									·	
				·						